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10/519,292	12/23/2004	Guido Knobel	04-605	9139
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EXAMINER				
BODAWALA, DIMPLE N				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/519,292

Applicant(s)

KNOBEL, GUIDO

Examiner

DIMPLE BODAWALA

Art Unit

1743

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 25-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26 is/are allowed.
- 6) ☒ Claim(s) 25, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsman's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

New Ground of Rejection

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 27 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 27 cites claimed element “**means for adjusting the pressure of the cooling water from a pressure P1 to a pressure P2**” is a means (or step) plus function limitation that invokes 35 U.S.C.112, sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. Claim is vague and indefinite because it is unclear which adequate structural limitation is involved to perform the function as cited in claims. See *In re Donaldson Co.*, 16 F.3D 1189, 1195, 29 USPQ2d 1845, 1850 (Fed. Cir. 1994). MPEP § 2181.

Applicant is required to:

- Amend the claim so that the claim limitation will no longer be a means (or step) plus function limitation under 35 USC 112,6th paragraph; or
- Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function without introducing new matter.

If applicant is of the opinion that the written description already implicitly or inherently discloses the corresponding structure, material or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant is required to clarify the record by either:

- ▶ Amending the written description of the specification such that it expressly recites the corresponding structure, material or acts for performing the claimed function and clearly links or associates the structure, material or acts to the claimed function, without introducing any new matter (35USC 132(a)); or
- ▶ Stating on the record what the corresponding structure, material or acts, which are implicitly or inherently set forth in the written description of the specification; perform the claimed function.

35 USC § 112, Sixth paragraph

4. Where claim limitations (means plus function) of claim 27 meets the 3-prong analysis and is being treated under 35 U S C 112, sixth paragraph, the examiner will include a statement in the Office action that the claim limitations being treated under 35 U S C 112, sixth paragraph.

5. Instant application fails to teach or suggest an adequate structural limitation for performing function, such as, means for adjusting the pressure of the cooling water from a pressure P1 to a pressure P2.

6. **Cartwright et al. (US 6,537,483)** discloses mold (110) having a moulding cavity which received moldable material; and flexible and impermeable bag material (114) is placed over the material (112), wherein the bag material (114) comprises an internal space (126) is occupied with a fluid via lines (130,132) wherein the movement of the fluid is involved to improve heat transfer, and to apply the pressure toward the flexible member (114) (See col.4 lines 31-38), wherein the fluid is water (See col.4 lines 57-58). It further teaches that the fluid controller (128) provides a fluid via lines (130,132) and may control such thing as the motion or movement of fluid, the pressure applied to the flexible member (or bag), wherein the pressure may be controlled using device such as pump (See col.5 lines 33-38), thus pump or controller of Cartwright et al. ('483) enable to use as means for adjusting pressure of cooling water from P1 to pressure P2.

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
8. **Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Binley (US 5,409,722) in view of Vos (US 5,102,672).**
9. **Binley ('722)** discloses an invention related to manufacture an **edible consumable** product, such as chocolate, particularly in shell form, wherein invention comprises two separable mould surfaces, which defines a closed cavity as a mould containing consumable product, such as solid fat containing product, especially **chocolate product** (See col.2 lines 1-5). It further teaches that the invention comprises a **ram (2)** which is held **at cooled temperatures in association with cooling device** (See examples 1-2). It further teaches that the cooling ram (2) having an **axial bore (8)** (See figure 1). It further teaches that the ram (2) is configured to selectively move into and out of the mold in order to form shell of the consumable product (See figures 1-2). Binley ('722) further teaches that the process can be operated at ambient to freezing temperature (See column 2, lines 29-31). Binley ('722) further teaches that insert (3) having an **injection rod (9) is received within the axial bore (8) of the cooling ram (2)** (See col.3 lines 30-42), wherein end of rod (9) is configured to move within the axial bore (See figures 1-2), thus rod (9) would be used as a **displacement ram** as claimed, wherein rod (9) is moveable within the central bore of the ram (2), such as, the end of the rod (9) contacts and is retained by an inwardly directed collar (13) adjacent channel (8) (See col.3 lines 30-40), so that the space is formed at vertex, wherein such statement indicates that the rod (9) is enable to move in a first position within the center bore (8) of the ram (2), while the ram (2) is in contact with the die part (1) and defined cavity there between. Figure 2 of Binly is related to mold closing position, wherein rod (9) is in contact with end of the ram (2), thus such statement indicates that the rod (9) is enable to move in a second position within the center bore (8) of the ram (2) for supplying the material within the space (11)

by using piston feed operating through connection (10) (See col.3 lines 43-46), while the ram (2) is in contact with the die part (1) and defined cavity there between.

10. Binley ('722) further teaches that the ram is associated with cooling device in order to hold the temperature from room temperature to below freezing temperature as discussed above, but fails to teach or suggest that the cooling ram is a water cooled ram as claimed.

11. Vos ('672) discloses an invention which comprises a cone-shaped mold as male shaping member having an internal space, wherein **internal space of the die including passageways (34) is involved to supply cooling fluid, such as water from the source of ice-water bucket or other** (See abstract).

12. Vos ('672) is in the same art as Binley ('722) of forming chocolate products using molds. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the cooling male die or ram of Binley ('722) by providing cooling passage within the internal of the die, wherein passages communicating with cooling water, and, thus the male die is interiorly cooled (See abstract) as taught by Vos ('672), since Vos ('672) teaches that the use of such ice-water cooling is effective to solidify a chocolate product. The combination of Binley ('722) and Vos ('672) has established nothing more than predictable result of solidifying the chocolate using the cooling means of Vos. KSR International Co. v. Teleflex, Inc., 550 U.S. 398, 82 USPQ2d 1385 (2007).

13. Claim 25 of the instant application cites structural limitations with the intended uses as further limitations of the subject matter, such as, **"the displacement ram ...to contact the at least partially formed outer shell of consumable material to expel air inclusions therefrom when the water-cooled ram is in the second position"**. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, In re Finsterwalder, 168 USPQ 530. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself,

In re Casey, 152 USPQ 235, 238. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, Ex parte Thibault, 164 USPQ 666. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, Ex parte Masham, 2 USPQ2d 1647.

14. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boyhan (WO 97/49296) in view of Boyhan (US 5,558,895) and further in view of Cartwright et al. (US 6,537,483).**

15. **Boyhan ('296)** discloses a molding apparatus for making a shell molded article, wherein invention comprises **a molding cavity (14) of the mould; a former plate (320) as ram** is configured to selectively move into and out of the mold (See figures 6-7), wherein such position of the ram is counted as first and second position of the ram as cited in claim. It further teaches that the ram (20,320) comprises **an internal space**, which is surrounded by **a flexible forming member (18,318)** (See figures 1-8), wherein the flexible forming means may have positive fluid pressure provided thereto during the moulding process to assist in retaining the desired shape of the flexible forming member (See page 10 lines 11-18). It further teaches that the mould cavity (14) is provided with a moulding surface (16); and the liquid moulding material (22) provided in the bottom of the mould cavity (See page 6 lines 10-24). It further teaches that the invention may be employed with thermo-setting moulding material or any other liquid moulding material which solidifies as a result (See page 10 lines 19-21), but, fails to teach or suggest that the moulding material is a consumable material.

16. Furthermore, **Boyhan ('296)** incorporated a **Boyhan (US 5,558, 895)** in the disclosure (See page 1 lines 18-20), and teaches that the apparatus is for the same purpose of forming shell products. **Boyhan ('895)** clearly describes that the invention is involved to produce a shell molded article, wherein invention comprises mold cavity of an open

mold; a deformable forming member and a liquid material disposed in the mold cavity, wherein the liquid material is confectionery, such as molten chocolate (14) (See col.3 lines 59-60; col.4 lines 48-50). So it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Boyhan ('296) by providing consumable material (such as molten chocolate) as liquid moulding material within the mould cavity of the open mold** as taught by **Boyhan ('895).**

17. **Boyhan ('296)** further teaches that the invention is particularly suitable for molding liquid material which solidify upon cooling to ambient temperature, the apparatus may be equally employed where additional **heating or cooling means are provided in or to the mould, in connection with the forming means (18)** or otherwise, and also the flexible forming means may have positive fluid pressure provided thereto during the moulding process to assist in retaining the desired shape of the flexible forming member (See page 10 lines 11-18), thus, such statement indicates that the internal space of the ram (or internal space of the flexible forming member) enable to have cooling means, but fails to teach or suggest cooling water as cited in claim.

18. **Cartwright et al. ('483)** discloses an invention which comprises mold (110) having a moulding cavity which received thermoplastic material (112); and flexible and impermeable bag material (114) is placed over the material (112), wherein the bag material (114) comprises an internal space (126) is occupied with a fluid via lines (130,132) wherein the movement of the fluid is involved to improve heat transfer, to apply the pressure toward the flexible member (114) (See col.4 lines 31-38), wherein the fluid is water (See col.4 lines 57-58), wherein the fluid with fluid controller may also include a coil or temperature controller which either is cooled or heated according to the desired process (See col.5 lines 25-40), thus, the invention of Cartwright et al. comprises an internal space of flexible member which is filled with cooling water. It further teaches that the fluid controller (128) provides a fluid via lines (130,132) and may control such thing as the motion or movement of fluid, the pressure applied to the flexible member (or

bag), wherein the pressure may be controlled using device such as pump (See col.5 lines 33-38), thus pump or controller of Cartwright et al. ('483) enable to use as means for adjusting pressure of cooling water from P1 to pressure P2, but fails to teach or suggest that the pressure P2 is greater than the pressure P1. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of **Cartwright et al. ('483)** by optimizing pressure of fluid in claimed range by using suitable controller (such as pump), wherein pressurized fluid is supplied within the flexible member, in order to inflate the flexible member for applying extra compaction pressure to the moldable material (See col.4 lines 54-56). It is well settled that the determination of the optimum value of a cause effective variable, such as in this case, the range of pressure of supplying fluid is within the skill of one practicing art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980); In re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955). It is not necessary that the prior art suggests expressly or in so many words the changes or possible improvements the inventor made but that the knowledge is clearly present. In re Sernaker, 217 USPQ 1 (Fed. Cir. 1983).

19. Boyhan ('296) and Cartwright ('483) both are in the art of molds using flexible forming members with cooling means. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the internal space of the flexible forming member of **Boyhan ('296)** by providing cooling water as coolant as taught by **Cartwright et al. ('483)** because such configuration enable to exhibit the ram of prior art with heat transfer property which could be used in varied applications, such as pressure and cooling application, in order to solidify and mold the material in excellent appearance and quality. The substitution of one known element for another yields predictable results to one of ordinary skill in the art. In this case, the use of cooling water within internal space of flexible member as taught by secondary arts, instead of coolant within the internal space of flexible forming member of primary art would provide predictable results of cooling water for quickly solidifying the molding material within

the cavity, see *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982); *In re O'Farrell*, 853 F.2d 894, 7 USPQ2d 1673 (fed. Cir.1988); *Ruiz v. Chance Co.*, 357 F.3d 1270, 69 USPQ2d1686 (Fed. Cir. 2004).

20. Claim 27 of the instant application cites structural limitations with the intended uses as further limitations of the subject matter, such as, **"...the cooling water under pressure communicates with the internal space of the water-cooled ram to expand the flexible sheath within the mold for displacing an amount of consumable material when the water-cooled ram is in the second position"**. Intended use has been continuously held not to be germane to determining the patentability of the apparatus, *In re Finsterwalder*, 168 USPQ 530. The manner or method in which a machine is to be utilized is not germane to the issue of patentability of the machine itself, *In re Casey*, 152 USPQ 235, 238. Purpose to which apparatus is to be put and expression relating apparatus to contents thereof during the intended operation are not significant in determining patentability of an apparatus claim, *Ex parte Thibault*, 164 USPQ 666. A recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations, *Ex parte Masham*, 2 USPQ2d 1647.

21. **Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 3,642,415) in view of NPL (Edible Food Cup...) and Cartwright et al. (US 6,537,483).**

22. **Johnson ('415) discloses a plunger diaphragm device comprises a mold (13); a reciprocable press headplate operated by ram or plunger rod (12), wherein plate (11) is secured a forming ram (14) of a size to enter into the container with predetermined clearance on the sides (See col.2 lines 40-47), wherein ram comprises a hollow internal space and a shell of rigid material (14,21) surrounding the internal space (See figure 1), wherein the shell (21) is provided with a passage which communicate with the internal space with the mold when the ram (14) is located in the mold (See figures 1-3), wherein**

the passage is covered by a diaphragm (20) (See figure 1). It further teaches that the ram (14) is selectively moveable into positions such as into and out of the mold (See figs 1-3). It further teaches that the apparatus comprises **a fluid conduit (23) in communication with the internal space of the ram**, wherein the fluid conduit is involved to supply pressure fluid (See fig. 1; col.2 lines 64-67), thus such statement suggests that the source of fluid under pressure communicates with the internal space of ram for expanding the diaphragm into the mold. It further teaches that the invention is applicable to suitable thermoplastic material such as, polypropylene, polyethylene, **polystyrene, cellulose acetate, cellulose butyrate, cellulose nitrate**, ABS etc., which can be porous open-cell or closed cell foamed material or even perforated blanks (See col.5 lines 13-25), wherein such statement inherently indicates that the moldable material as listed above would be used as consumable material, in order to make consumable product, such as a Styrofoam or cellulose cup or container (See col.6 lines 18-25 of reference (US 5,783,126)); and wherein the cellulose polymer would be used for edible product (See abstract of reference (US 5,470,581)), wherein molding material of Johnson ('415) is capable to use for making **edible** product. Figure 6 of **Johnson ('415)** shows that the female mold having interior space with tapered surface, and male mold member mate with female mold during mold closing position, wherein the male mold member capable to have vertex end, but fails to teach or suggest that the shape of male mold member having vertex end. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the configuration of male mold member of **Johnson ('415)** by suggesting **vertex end**, wherein such alignment enable to mate with tapered surface of the female mold during the mold closing position, in order to cast the product with excellent appearance.

23. **Johnson ('415)** further teaches that the invention is capable to control the temperature of the material and article while being formed and for this purpose various heating and **cooling means** may be desirable for the apparatus and **fluids** used and that

such are routine in the art (See col.5 lines 45-47), but fails to teach or suggest that the supply source supplying cooling water as fluid under pressure as cited in claim.

24. **Cartwright et al. ('483)** discloses an invention which comprises mold (110) having a moulding cavity which received thermoplastic material (112); and flexible and impermeable bag material (114) is placed over the material (112), wherein the bag material (114) comprises an internal space (126) is occupied with a fluid via lines (130,132) wherein the movement of the fluid is involved to improve heat transfer, to apply the pressure toward the flexible member (114) (See col.4 lines 31-38), wherein the fluid is water (See col.4 lines 57-58), wherein the fluid with fluid controller may also include a coil or temperature controller which either is cooled or heated according to the desired process (See col.5 lines 25-40), thus, the invention of Cartwright et al. comprises an internal space of flexible member which is filled with cooling water.

25. Johnson ('415) and Cartwright ('483) both are in the art of molds using flexible forming means. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify internal space of the plunger of **Johnson ('415)** by communicating with cooling water as taught by **Cartwright et al. ('483)** because such alignment is capable to inflate the diaphragm of primary art in desired configuration quickly, and, thus, enable to compress the molded material within the mold, in order to manufacture the product in desired feature and configuration such as smoothness surface of the finished article and contributes to its appearance and marketability. The substitution of one known element for another yields predictable results to one of ordinary skill in the art. In this case, the use of cooling water within internal space of flexible member as taught by Cartwright, would provide predictable results of cooling the mold, wherein such alignment inflates the diaphragm very quickly in desired pattern, and thus enable to solidify the molding material within the cavity with excellent appearance and quality, see *In re Fout*, 675 F.2d 297, 213 USPQ 532 (CCPA 1982); *In re O'Farrell*,

853 F.2d 894, 7 USPQ2d 1673 (fed. Cir.1988); Ruiz v. Chance Co., 357 F.3d 1270, 69 USPQ2d1686 (Fed. Cir. 2004).

Allowable Subject Matter

26. **Claim 26 is allowed.**

27. The following is an examiner's statement of reasons for allowance: The prior arts cited in the office action or prior arts previously recorded, wherein none of the references, taken alone or in combination, inter alia fairly teaches or suggests configuration of an apparatus for producing consumable chocolate product as set forth in claim.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

28. **For rejection of claim 25**, Applicant argues that Binly (US 5,409,722) discloses an injection rod (9) does not assume two different positions within the channel (8) of the die part (2); and secondary reference Vos (US 5,102,672) does not cure the deficiencies of the primary reference.

29. In response to Applicant's arguments, Binly ('722) discloses chocolate molding apparatus comprises die part (2) which includes central channel (8) is adapted to receive rod (9) (See figures 1-2). It further teaches that the end of the rod (9) contacts and is retained by an inwardly directed collar (13) adjacent channel (8) (See col.3 lines 30-40), so that the space is formed at vertex (emphasis added), wherein such statement indicates that the rod (9) is enable to move in a first position within the center bore (8) of the ram (2), while the ram (2) is in contact with the die part (1) and defined cavity there between. Figure 2 of Binly is related to mold closing position, wherein rod (9) is in contact with end of the ram (2), thus such statement indicates that the rod (9) is enable to move in a second position within the center bore (8) of the ram (2) for supplying the material within

the space (11) by using piston feed operating through connection (10) (See col.3 lines 43-46), while the ram (2) is in contact with the die part (1) and defined cavity there between. As of conclusion, the claimed limitation of claim 25 is still read by Binly ('722), and, therefore, the rejection of claims over Binly ('722) and Vos ('672) is maintained.

30. **For rejection of claim 26**, Applicant argues that Czetli (US 3,587,132) does not have vertex end. Applicant further argues that Czetli ('132) teaches that the material injected into the tube (35) is steam which would be totally unsuitable for the production of a chocolate material in a mold as the chocolate material would be liquid with steam injection.

31. Applicant's arguments are fully considered, and, found persuasive, therefore, rejection of claim over Czetli ('132) is withdrawn because Czetli ('132) fails to teach or suggest mold containing a consumable chocolate material; and a source of gas at ambient temperature connected to the tube as claimed.

32. **For rejection of claim 27**, Applicant argues that neither Boyhan (WO 97/49296) nor Boyhan (US 5,558,895) nor Cartwright et al. (US 6,537,483) teaches or suggests or render obvious such a means for providing sequential pressurization of the flexible sheath in the manner as cited in claim.

33. In response to Applicant's arguments, Cartwright et al. ('483) discloses mold (110) having a moulding cavity which received moldable material; and flexible and impermeable bag material (114) is placed over the material (112), wherein the bag material (114) comprises an internal space (126) is occupied with a fluid via lines (130,132) wherein the movement of the fluid is involved to improve heat transfer, to apply the pressure toward the flexible member (114) (See col.4 lines 31-38), wherein the fluid is water (See col.4 lines 57-58). It further teaches that the fluid controller (128) provides a fluid via lines (130,132) and may control such thing as the motion or movement of fluid, the pressure applied to the flexible member (or bag), wherein the pressure may be controlled using device such as pump (See col.5 lines 33-38), thus pump

or controller of Cartwright et al. ('483) enable to supply fluid at varied pressure. As of conclusion, the claimed limitation of claim 27 is still read by combination of Boyhan (WO 97/49296); Boyhan (US 5,558,895); Cartwright et al. (US 6,537,483), and, therefore, the rejection of claims is maintained.

34. **For rejection of claim 28**, Applicant argues that claim has been amended so as to define the vertex region of the water cooled ram, that the passage is provided at the vertex region and that a diaphragm is located at the vertex region for displacement under cooling water pressure, wherein such claimed structure is not shown or disclosed in either Johnson (US 3,642,415) or Cartwright et al. (US 6,537,483). Applicant's arguments are moot in view of new ground of rejection of claim as discussed above.

Conclusion

35. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **DIMPLE BODAWALA** whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH S. DEL SOLE can be reached on (571) 272-1130. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. B./
Examiner, Art Unit 1743

/Joseph S. Del Sole/
Supervisory Patent Examiner, Art Unit 1743